



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

000001

REPLY TO THE ATTENTION OF:

SR-6J

June 16, 1997

DCL0970

Mr. Joseph Benedict  
Forest Preserve District of DuPage County  
P.O. Box 2339  
Glen Ellyn, IL 60138

EPA Region 5 Records Ctr.



248040

RE: Leachate Collection System Expedited Final Design

Dear Mr. Benedict:

Thank you for submittal of the revised document entitled *Final Leachate Collection System Expedited Final Design, Blackwell Forest Preserve Landfill*, dated May, 1997.

The United States Environmental Protection Agency (USEPA) and the Illinois Environmental Protection Agency (IEPA) have reviewed this document in light of our April 4, 1997 comment letter. This review indicates that the majority of our comments were adequately addressed and incorporated into the revised final design. For this reason, we are granting interim document approval. However, there are a few minor clarifications summarized below that need to be addressed before final approval will be granted and construction can begin.

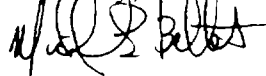
- It is understood that drawings and details for the leachate extraction wells, lift station pumps, compressor station, foundation slab dimensions, and calculations for sizing the compressor will be supplied as an addendum when the equipment supplier is selected. This addendum must be reviewed before final LCS approval can be granted.
- The Operation and Maintenance Plan (O&M Plan) includes fundamental design criteria for the transition from active to passive gas extraction and construction of the flaring apparatus. For this reason, a complete review of the O&M plan is also required prior to final approval.
- Detail 2 in Drawing D3 shows the landfill gas vent pipe. Support calculations for the concrete pad and concrete footing shown should be provided for completeness. In addition, a note should be added to Detail 2 to clarify whether the concrete pad and concrete footing are connected as shown and, if they are, to provide a specification for the connection.

- The design criteria for the negative pressure calculation in Appendix D2 indicate that the gas flow rate for each extraction well is 10 cubic feet per minute (cfm). The total maximum system gas flow is 100 cfm, and the vacuum required at extraction well EW08 is 15 inches of water column. Please provide justification for selecting these values for design purposes. According to the response to Specific Comment 2, an active gas collection system will be required if it is determined that uncontrolled gas emissions are occurring through or around the cap. If an active system is necessary, the design gas extraction flow rate and vacuum required will be based on the rate of gas generation and the capture zone necessary to control off-site gas migration. On-site tests using the existing gas extraction wells may be needed to establish design criteria to properly size the blower. Appendix D2 should present the design criteria and indicate that these criteria will need refinement to properly design an active system.
- Page 11 of the responses states that Montgomery Watson will perform construction quality assurance activities and that an independent third party will perform quality control activities. Appendix F, Section 3.4, Page 3-3 should identify the independent third party.

Finally, with regard to the pipe that passes under the north part of the landfill. Based on the photos provided in the letter from MW dated May 15, 1997, it appears that the West Stormwater Pipe (as shown in photo 1) is designed for the transport of surface water from storm events (based on its shallow placement and no apparent perforations in the pipe). However, the North Collector Pipe (as shown in photo 4), appears to be a completely perforated PVC pipe located at the bottom of a deep trench (appears 6 to 8 feet deep in photo 5). This appears more consistent with subsurface liquid capture (i.e., leachate) rather than stormwater transport. For this reason, the perforated PVC pipe beneath the north portion of the landfill should be connected to the leachate system and not allowed to discharge to the woods. Further, if the recent sample indicates the presence of contaminants, appropriate soil sampling will be required at the discharge point in the woods.

Once the appropriate documents have been submitted and approved, and the minor changes above are made, we will issue formal approval. In order to minimize reproduction, please submit only the required replacement pages with the holes pre-punched so we can just replace the pages. If you have questions regarding this letter, or would like to discuss any of these comments in greater detail, please contact me at (312) 353-6425 and we can set up a conference call with Rick Lanham of IEPA.

Sincerely,



Michael E. Bellot  
EPA Remedial Project Manager

cc: Rick Lanham, IEPA  
Jerry Hartwig, FPD  
Peter Vagt, MW  
Kostas Dovantzis, PRC